Whether you manage a fleet of Emergency Response vehicles or Heavy Utility trucks, our products can help you manage battery loads and prevent battery damage. The constant evolution of technology in the communication arena and ever-increasing costs have created a vital need for proactive protection. Also, the ability to use communication equipment with the engine turned off, while ensuring the battery will still have enough power to start the vehicle is proving to be increasingly important. AC/DC Industries is on the leading edge of technology in load management and battery protection with our MZL Shut Down Delay Timer.

Benefits of the MZL Shut Down Delay Timer:

1. **Delay Timing:** Our timer can be programmed to cover a range of 15 minutes to 8 hours by just the flip of a switch.

2. **Load Management:** Supplies a centrally controlled power source that will turn off all electronic equipment at the same time. Works in addition to OEM/Built-in timers.

3. **Low Voltage Protection:** Should the output from the battery drop below 10.5 Volts the unit will shut down all equipment. This will allow for enough cranking amps to start the engine.

4. **Over Voltage Protection:** Should the alternator have a problem, the device will protect the equipment from over voltage (shutdown occurs at 16.75 to 17 Volts DC).

If you need any additional information please feel free to call us at (800) 888-0909 or e-mail: sales@acdcind.com. Thank you for your interest in our products and we look forward to hearing from you.

**ALL OUR PRODUCTS ARE PROUDLY MADE IN THE USA!**
MZL-10

STARTS TIMING WHEN IGNITION TURNS OFF

- Battery guard system
- Emergency override switch provides a convenient way to restore power to your equipment by holding the button for 3 seconds.
- Programmable with external DIP switch for selecting and adjusting time delay
- Built in diagnostic with Red LED indicates timing functions active when flashing
- Engineered electronically for reverse polarity protection
- Potted compound construction. Solid state, sealed against vibration and moisture.
- Easy external connection with .250 male tab mating with .250 female disconnect
- Delay time range: from 15 minutes to 8 hours. Tolerance plus (+) or minus (-) 10%

ALSO AVAILABLE

MZL-1024  24 V  30 AMP
IGNITION SENSING SHUT DOWN DELAY TIMER
STARTS TIMING WHEN IGNITION TURNS OFF
MZL-10SW 12 \text{ V} \quad 30 \text{ AMP}

WITH SPADE AND WIRE

- Battery guard system
- Emergency override switch provides a convenient way to restore power to your equipment by holding the button for 3 seconds.
- Programmable with external DIP switch for selecting and adjusting time delay
- Built-in diagnostic Red LED indicates timing functions active when flashing
- Engineered electronically for reverse polarity protection
- Potted compound construction. Solid state, sealed against vibration and moisture.
- Easy external connection with .250 male tab mating with .250 female disconnect
- Delay time range: from 15 minutes to 8 hours. Tolerance plus (+) or minus (-) 10%
MZL-100

12 V 75 AMP

STARTS TIMING WHEN IGNITION TURNS OFF

- Heavy Duty 75 amp encapsulated Shut Down Delay Timer
- Battery guard system
- Emergency override switch provides a convenient way to restore power to your equipment by holding the button for 3 seconds.
- Programmable with external DIP switch for selecting and adjusting time delay
- Built-in diagnostic Red LED indicates timing functions active when flashing
- Engineered electronically for reverse polarity protection
- Potted compound construction. Solid state, sealed against vibration and moisture.
- Delay time range: from 15 minutes to 8 hours. Tolerance plus (+) or minus (-) 10%

ALSO AVAILABLE

MZL-124 24 V 50 AMP

HEAVY DUTY. STARTS TIMING WHEN IGNITION TURNS OFF
MZL-26

12 v  30 AMP

COMBINATION SHUT DOWN DELAY TIMER WITH 6 FUSE OUTPUT

- Battery guard system
- Emergency override switch provides a convenient way to restore power to your equipment by holding the button for 3 seconds.
- Programmable with external DIP switch for selecting and adjusting time delay
- Built-in diagnostic Red LED indicates timing functions active when flashing
- Engineered electronically for reverse polarity protection
- Potted compound construction. Solid state, sealed against vibration and moisture.
- Easy external connection with .250 male tab mating with .250 female disconnect
- Delay time range: from 15 minutes to 8 hours. Tolerance plus (+) or minus (-) 10%

Fuses are not included
HEAVY DUTY COMBINATION SHUT DOWN DELAY TIMER WITH 6 FUSE OUTPUT

- Battery guard system
- Emergency override switch provides a convenient way to restore power to your equipment by holding the button for 3 seconds.
- Programmable with external DIP switch for selecting and adjusting time delay
- Built-in diagnostic Red LED indicates timing functions active when flashing
- Engineered electronically for reverse polarity protection
- Potted compound construction. Solid state, sealed against vibration and moisture.
- Easy external connection with .250 male tab mating with .250 female disconnect
- Delay time range: from 15 minutes to 8 hours. Tolerance plus (+) or minus (-) 10%

Fuses are not included
MZL-18

STARTS TIMING WHEN VOLTAGE STARTS DROPPING. NO IGNITION CONNECTION

- MZL-18 is based on low-voltage dropout. Timer begins delay when ignition is turned off and the built-in detector detects voltage dropping
- Emergency override switch provides a convenient way to restore power to your equipment by holding the button for 3 seconds.
- Programmable with external DIP switch for selecting and adjusting time delay
- Built-in diagnostic Red LED indicates timing functions active when flashing
- Engineered electronically for reverse polarity protection
- Potted compound construction. Solid state, sealed against vibration and moisture.
- Delay time range: from 15 minutes to 8 hours. Tolerance plus (+) or minus (-) 10%

ALSO AVAILABLE

MZL-1824

24 V  30 AMP

STARTS TIMING WHEN VOLTAGE STARTS DROPPING. NO IGNITION CONNECTION
MZL-52

STARTS TIMING WHEN VOLTAGE STARTS DROPPING. NO IGNITION CONNECTION

- MZL-52 is based on low-voltage dropout. Timer begins delay when ignition is turned off and the built-in detector detects voltage dropping
- Battery guard system
- Emergency override switch provides a convenient way to restore power to your equipment by holding the button in
- Programmable with external DIP switch for selecting and adjusting time delay
- Engineered electronically for reverse polarity protection
- Potted compound construction. Solid state, sealed against vibration and moisture.
- Delay time range: from 15 minutes to 8 hours. Tolerance plus (+) or minus (-) 10%

12 V  30 AMP

With 6 Fuse Panel
Fuses are not included
MZL-180

STARTS TIMING WHEN VOLTAGE STARTS DROPPING. HEAVY DUTY

- MZL-180 is based on low-voltage dropout. Timer begins delay when ignition is turned off and the built-in detector detects voltage dropping.
- Heavy Duty 75 amp encapsulated Shut down delay timer.
- Emergency override switch provides a convenient way to restore power to your equipment by holding the button for 3 seconds.
- Programmable with external DIP switch for selecting and adjusting time delay.
- Engineered electronically for reverse polarity protection.
- Potted compound construction. Solid state, sealed against vibration and moisture.
- Delay time range: from 15 minutes to 8 hours. Tolerance plus (+) or minus (-) 10%.
MZL-200
12 V 200 AMP

HIGH CURRENT HEAVY DUTY, IGNITION SENSING SHUT DOWN DELAY TIMER

- High Current Heavy Duty 200 amp encapsulated Shut Down Delay Timer.
- Emergency override switch provides a convenient way to restore power to your equipment by holding the button in for 3 seconds.
- Programmable with external DIP switch for selecting and adjusting time delay
- Built-in diagnostic Red LED indicates timing functions active when flashing
- Built-in Green LED for power indication
- Engineered electronically for polarity protection
- Potted compound construction. Sealed against vibration and moisture. Intrinsically safe and non-incendiary
- Delay time range: from 15 minutes to 8 hours. Also available in short version: 15 minutes to 8 minutes.
- One year warranty
**USB-1036**

**12 V  30 AMP**

**PROGRAMMABLE VIA USB FOR SELECTING AND ADJUSTING TIME DELAY**

- Programmable via USB for selecting and adjusting time delay
- Built-in diagnostic Red LED indicates timing functions active when flashing; Green LED indicates that the power is on; Emergency reset button provides a convenient way to restore power to your equipment by holding the button down for 10 seconds
- Engineered electronically for reverse polarity protection
- Potted compound construction. Solid state, sealed against vibration and moisture
- Easy external connection with .250 male tab mating with .250 female disconnect
- Delay time range: from 1 second to 8 hours. Tolerance plus (+) or minus (-) 10%
- Allow 3-5 seconds for delay on break at ignition switch connection for delay activation
- For installation, connect red wire (+) to the battery positive post, and black wire to battery (-) negative post. Connect the blue wire to the ignition switch to AM/FM radio or cigarette lighter.

Laptop Shutdown Option
FIRE AND HEAVY TRUCK LOAD. ON/ON SHUT DOWN DELAY TIMER

When cranking engine, vehicle electronics systems are in standby to prevent data loss, the heavy current draw of cranking combined with a full electronics suite can cause voltage drops severe enough to upset memorized settings. By delaying the equipment activation until after the engine is completely started, the on/on Shut Down Delay Timer prevents data loss and vehicle down time.

- Emergency override switch provides a convenient way to restore power to your equipment by holding the button for 3 seconds.
- Programmable with external DIP switch for selecting and adjusting time delay
- Built-in diagnostic Red LED indicates timing functions active when flashing
- Engineered electronically for reverse polarity protection
- Delay time range: from 5 seconds to 120 seconds (two minutes). Tolerance plus (+) or minus (-) 10%
VS-10
12 v  30 AMP

NOT A SHUT DOWN DELAY TIMER. ALWAYS ON, LOW VOLTAGE SENSOR

- Built-in diagnostic Green LED indicator
- Engineered electronically for reverse polarity protection
- Potted compound construction. Sealed against vibration and moisture
- Easy external connection with .250 male tab mating with .250 female disconnect

ALSO AVAILABLE

VS-100 12 v  75 AMP
HEAVY DUTY. LOW VOLTAGE SENSOR. ALWAYS ON.
To order the AC/DC Industries catalog, please contact us at (800) 888-0909 or e-mail: sales@acdcind.com.